

## EPA Official Record

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**From:** John Lovell/R3/USEPA/US

**To:** <deborah.hoag@readingpa.org>

**Delivered Date:** 05/09/2011 09:19 AM EDT

**Subject:** RE: WERF Study on Silver Nanoparticles

Information such as the inhibition criteria are not updated on an ongoing basis, but will be updated periodically. Generally if the guidance itself is updated we look to update the default data that is included in the guidance. I know when we were updating the local limits guidance (for the 2004 manual) our contractor did a literature search to look for new data to update the inhibition and other criteria. I'm not aware of any effort outside of that. My tendency is to say that for the silver nanoparticles the area of greatest impact in terms of the default data would be the background levels. If silver is used routinely in clothing and the silver comes out in the wash, you would have to assume that the background levels of silver would go up. On the other hand, with the increase in digital photography, the levels of silver from photo processors would potentially also be going down. There are a bunch of things that will impact the local limits reevaluation which is one of the reasons why it needs to be reevaluated periodically.

I also got your message on the consent agreement and will be looking at that as well. I'm hoping to get someone from our enforcement group to look at it as well since they have more experience with that sort of thing.

John Lovell  
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215-814-5790  
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▼ ---05/06/2011 03:12:48 PM---John, This is an interesting bit of information. Based on our last phone

From: <deborah.hoag@readingpa.org>  
To: John Lovell/R3/USEPA/US@EPA  
Date: 05/06/2011 03:12 PM  
Subject: RE: WERF Study on Silver Nanoparticles

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John,

This is an interesting bit of information. Based on our last phone

conversation about the local limits, I was curious does US EPA consider this type of research and update the guidance and thresholds for use in local limits evaluation? I know we had discussed how effective the pretreatment program has been in preventing inhibition, so I was curious if this type of research was used when applicable. Thanks.

Deb

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-----Original Message-----

From: Lovell.John@epamail.epa.gov [mailto:Lovell.John@epamail.epa.gov]  
Sent: Tuesday, May 03, 2011 4:43 PM  
To: Elaine\_Wilson@dcwasa.com; rjd@dbfinc.com; dgbowie@nccde.org; mneutz@ci.wilmington.de.us; ffry@hanovereng.com; freddie.fields@alcosan.org; bjones@borough.ambler.pa.us; gcboliski@atlanticbbn.net; bajsa@verizon.net; kdancho@bethlehem-pa.gov; RBROCIUS@zippo.com; ebuzza@GFNET.com; Jim\_Monika\_Houstoun@msn.com; bcmanager@verizon.net; Richard.Czekanski@rve.com; Christine Volkay-Hilditch; smithgallm@delcora.org; wschutz@dtma.com; dbelcastro@chesterengineers.com; Glenn D.; jsnyder@ephrataboro.org; Kbaginski@erie.pa.us; bradley.smith@thearrogroup.com; laura@ghjsa.org; RFRANCIS@indianaboro.com; dwalter@johnstown-redevelopment.org; bwilcox@lasa.org; mleonard@cityoflancasterpa.com; khoffman@klhengineers.com; kdicarlo@mck-macm.org; boroughofmonaca@comcast.net; rchristofer@ncsapa.com; pwta75@verizon.net; jjmscengrs@aol.com; pennnwtp@comcast.net; Peter.Pineda@phila.gov; Keith.Houck@phila.gov; pcmadesk@aol.com; pxychas@verizon.net; mmchenry@punxsutawneyboro.com; Deborah A. Hoag; josephn@ssauth.org; hcane@shippensburg.pa.us; stephanie.clay@thearrogroup.com; TNulton@tyroneboropa.com; mkennedy@widmerengineering.com; billg@Gibson-thomas.com; mak12@ptd.net  
Cc: Copeland.Stephen@epamail.epa.gov; Ottinger.Elizabeth@epamail.epa.gov  
Subject: WERF Study on Silver Nanoparticles

FYI -

Water Environment Research Foundation (WERF) studied the effects of silver nanoparticles on activated sludge and anaerobic digestion processes. Link includes information on results of study. Silver nanoparticles are now being used as an antibacterial agent in, among other things, clothing. The study suggests that the particles come out in the wash and in high enough concentrations can inhibit sewage treatment plant processes.

<http://www.werf.org/AM/Template.cfm?Section=Home&CONTENTID=17679&TEMPLATE=/CM/HTMLDisplay.cfm>

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